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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/944,101	09/04/2001	Hiroshi Saito	040894-5703	1751
9629	7590	05/05/2004	EXAMINER	
MORGAN LEWIS & BOCKIUS LLP 1111 PENNSYLVANIA AVENUE NW WASHINGTON, DC 20004			JACKSON, JAKIEDA R	
			ART UNIT	PAPER NUMBER
			2655	

DATE MAILED: 05/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/944,101

Applicant(s)

SAITO, HIROSHI

Examiner

Jakieda R Jackson

Art Unit

2655

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
2. The Specification is objected to because the term "voice recognition" is misused for what nowadays is called --speech recognition-- in the speech signal processing art. While "voice recognition" and "speech recognition" were both once used interchangeably to refer to spoken word recognition, nowadays these two terms are distinguished. The term "voice recognition" now denotes identification of who is doing the speaking (class 704/246), while "speech recognition" (or word recognition) denotes identification of what is being said (class 704/251). For example, **claim 1** recognizes *speech* by the list of queuing words. So, appropriate correction to the proper terms of art is required (e.g. page 2, line 24).

Drawings

3. Figure 13 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Objections

4. **Claims 1-11** are objected to because of the following informalities:
- Regarding **claims 1-11**, the misuse of the term --speech recognition-- for the intended "voice recognition".
 - Regarding **claim 2**, the phrase --institutions every type--, should be "institutions of different types".
 - Regarding **claim 3**, the phrase --every area--, should be " of different areas".
 - Regarding **claim 5**, there should be a space between the words --A-- and --voice--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

6. **Claims 1-11** are rejected under 35 U.S.C. 102(a) as being anticipated by Hirayama et al. (EP 1 083 405 A1), hereinafter referenced as Hirayama. Alternatively, **Claims 1-11** are rejected under 35 U.S.C. 102(e) as being anticipated by Kono et al. (U.S. Patent No. 6,169,972), hereinafter referenced as Kono.

Regarding **claim 1**, Hirayama discloses a speech recognition unit and method (figure 1, element 200 and column 5, lines 15-21) comprising:

a plurality of speech recognition dictionaries mutually hierarchically related (figures 2A-2C; column 7, lines 21-23 and 49-51);

an extractor that extracts a desired dictionary (given category) out of said speech recognition dictionaries as a list of queuing words (column 8, lines 43-51);

a selector (data selection device) that selects a desired dictionary (certain division block) out of the speech recognition dictionaries (column 2, lines 48-54 and column 8, lines 43-51);

a storage (memory) that stores the dictionary selected by said selector as a list of queuing words at a higher-order hierarchy (figures 2A-C) than a hierarchy set beforehand together with the normal dictionary extracted by said extractor (column 2, lines 42-48 with column 8, lines 43-51); and

a recognizer that recognizes input speech (recognition software program) by comparing the input speech and the list of queuing words stored in said storage (column 6, lines 39-54).

Regarding **claim 2**, Hirayama discloses a speech recognition unit and method wherein said speech recognition dictionaries comprises:

a classification dictionary storing the classification names (classification categories) of institutions (figures 2A-2C; column 14, lines 25-53); and

an institution dictionary storing the names of institutions (names of ski resorts) which belong to a type of institutions of different types (figures 2A-2C; column 7, lines 21-41) .

Regarding **claim 3**, Hirayama discloses a speech recognition unit wherein said speech recognition dictionaries comprises:

an area dictionary storing area names (figures 8A-C; column 13, lines 21-38);
and

an institution dictionary storing the names of institutions existing in any area of different areas (figures 8A-C; entire country; column 7, lines 49-51 and column 13, lines 21-38).

Regarding **claims 4 and 5**, Hirayama discloses a speech recognition unit and method wherein said selector selects the institution dictionary as a desired dictionary (figures 2A-C; column 7, lines 21-41 and column 8, lines 10-19).

Regarding **claims 6 and 7**, Hirayama discloses a speech recognition unit wherein said extractor extracts a dictionary at a low-order hierarchy of recognized speech as queuing words (column 7, lines 10-20); and

wherein said extractor extracts a dictionary which belongs to a dictionary selected by said selector and which is located at a low-order hierarchy of the recognized speech extracts as queuing words (figures 2A-C; column 7, lines 30-41).

Regarding **claim 8**, Hirayama discloses a speech recognition unit and method for a speech recognition unit having a plurality of speech recognition dictionaries (column

7, lines 21-23 and ski resorts, golf courses etc.) mutually hierarchically related (figures 2A-C), said method comprising the steps of:

preparing dictionaries (dictionaries prepared) classified according to at least one narrowing-down condition set by a user beforehand (column 8, lines 10-19) together with a dictionary for narrowing down at a high-order hierarchy as objects of recognition (column 2, lines 36-42 with column 10, lines 15-39); and

recognizing input speech (column 5, line 58 – column 6, line 7) by using the dictionaries classified according to at least one the narrowing-down condition set by a user beforehand (column 8, lines 10-19) and the dictionary for narrowing down at a high-order hierarchy (column 2, lines 36-42 with column 10, lines 15-39).

Regarding **claim 9**, Hirayama discloses a speech recognition unit and method wherein: the dictionaries classified (ski resorts, golf courses etc.; figure 2A) according to at least one narrowing-down condition (column 7, lines 10-20) set by a user beforehand are dictionaries the frequency of use of which is high (basic dictionary commonly used; column 7, lines 21-27).

Regarding **claim 10**, it is interpreted and rejected for the same reasons as set forth in the combination of **claims 1 and 6**.

Regarding **claim 11**, it is interpreted and rejected for the same reasons as set forth in **claim 10**.

7. **Claims 1-11** are rejected under 35 U.S.C. 102(e) as being anticipated by Kono et al. (U.S. Patent No. 6,169,972), hereinafter referenced as Kono.

Regarding **claim 1**, Kono discloses a speech recognition unit and method (column 1, lines 5-9) comprising:

a plurality of speech recognition dictionaries mutually hierarchically related (figure 9; column 2, lines 28-38 with column 13, lines 59-65 and column 14, lines 11-23);

an extractor (extraction means) that extracts a desired dictionary (given category) out of said speech recognition dictionaries as a list of queuing words (column 4, lines 25-29 and column 15, lines 37-44);

a selector that selects a desired dictionary out of the speech recognition dictionaries (column 15, lines 25-58);

a storage (figure 1, element 5) that stores the dictionary (column 6, lines 49-50) selected by said selector as a list of queuing words at a higher-order hierarchy (figure 7) than a hierarchy set beforehand together with the normal dictionary extracted by said extractor (column 14, line 61 - column 15, line 6 and column 16, line 64 – column 17, line 4); and

a recognizer that recognizes input speech (column 2, lines 28-31) by comparing the input speech and the list of queuing words stored in said storage (column 1, lines 5-9).

Regarding **claim 2**, Kono discloses a speech recognition unit and method wherein said speech recognition dictionaries comprises:

a classification dictionary storing the classification names (column 14, lines 64-65) of institutions (figure 9; column 6, lines 51-57); and

an institution dictionary storing the names of institutions (names of ski resorts) which belong to a type of institutions of different types (figure 9; connected institution and inconnected institution) .

Regarding **claim 3**, Kono discloses a speech recognition unit wherein said speech recognition dictionaries comprises:

an area dictionary storing area names (figure 9, via point and figure 15, where; column 13, lines 27-35); and

an institution dictionary storing the names of institutions existing in any area of different areas (figure 9, via point and figure 15, where; column 13, lines 27-35).

Regarding **claims 4 and 5**, Kono discloses a speech recognition unit and method wherein said selector selects the institution dictionary as a desired dictionary (column 6, lines 53-57 and column 12, lines 36-37).

Regarding **claims 6 and 7**, Kono discloses a speech recognition unit wherein said extractor extracts a dictionary at a low-order hierarchy of recognized speech as queuing words (figure 18 with column 14, lines 42-55); and

wherein said extractor extracts a dictionary which belongs to a dictionary selected by said selector (column 15, lines 32-34) and which is located at a low-order hierarchy of the recognized speech extracts as queuing words (column 15, lines 37-58).

Regarding **claim 8**, Kono discloses a speech recognition unit and method for a speech recognition unit having a plurality of speech recognition dictionaries (station, shop, hotel etc.) mutually hierarchically related (figure 9 and column 13, lines 59-61), said method comprising the steps of:

preparing dictionaries (grammar set name is prepared) classified according to at least one narrowing-down condition set by a user beforehand (list of grammar set names) together with a dictionary for narrowing down at a high-order hierarchy as objects of recognition (figure 9 and column 14, line 61 – column 15, line 6); and

recognizing input speech (figure 1, element 3 with column 6, lines 9-10) by using the dictionaries classified according to at least one the narrowing-down condition set by a user beforehand (list of grammar set names) and the dictionary for narrowing down at a high-order hierarchy (figure 9 and column 14, line 61 – column 15, line 6).

Regarding **claim 9**, Kono discloses a speech recognition unit and method wherein: the dictionaries classified according to at least one narrowing-down condition set by a user beforehand (figure 9; list of grammar set names with column 14, line 61 – column 15, line 6) are dictionaries the frequency of use of which is high (necessary to be referred; column 15, line 59 – column 16, line 5).

Regarding **claim 10**, it is interpreted and rejected for the same reasons as set forth in the combination of **claims 1 and 6**.

Regarding **claim 11**, it is interpreted and rejected for the same reasons as set forth in **claim 10**.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

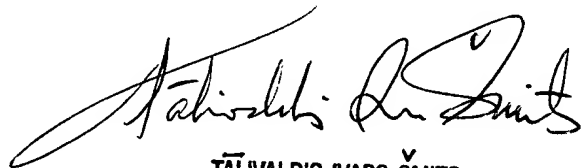
- Chong et al. (U.S. Patent No. 5,497,319) discloses a machine translation and telecommunications system.
- Iwata (U.S. Patent No. 6,385,582) discloses a man-machine system equipped with speech recognition device.
- Shaw et al. (U.S. Patent No. 6,363,342) discloses a system for developing word-pronunciation pairs.
- Kimura et al. (U.S. Patent No. 6,282,508) discloses a dictionary management apparatus and a dictionary server.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jakieda R Jackson whose telephone number is 703.305.5593. The examiner can normally be reached on Monday through Friday from 7:30 a.m. to 5:00p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Talivaldis I. Smits can be reached on 703. 306-3011. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JRJ
April 22, 2003

A handwritten signature in black ink, appearing to read 'Tāļvaldis Ivars Šmits', written in a cursive style.

TĀLVALDIS IVARS ŠMITS
PRIMARY EXAMINER